

**§ 97.503 Element standards.**

(a) A telegraphy examination must be sufficient to prove that the examinee has the ability to send correctly by hand and to receive correctly by ear texts in the international Morse code at not less than the prescribed speed, using all the letters of the alphabet, numerals 0–9, period, comma, question mark, slant mark and prosigns ar, bt, and sk.

(1) Element 1(A): 5 words per minute;

(2) Element 1(B): 13 words per minute;

(3) Element 1(C): 20 words per minute.

(b) A written examination must be such as to prove that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service licensee. Each written examination must be comprised of a question set as follows:

(1) Element 2: 35 questions concerning the privileges of a Novice Class operator license. The minimum passing

score is 26 questions answered correctly.

(2) Element 3(A): 30 questions concerning the privileges of a Technician Class operator license. The minimum passing score is 22 questions answered correctly.

(3) Element 3(B): 30 questions concerning the privileges of a General Class operator license. The minimum passing score is 22 questions answered correctly.

(4) Element 4(A): 50 questions concerning the additional privileges of an Advanced Class operator license. The minimum passing score is 37 questions answered correctly.

(5) Element 4(B): 40 questions concerning the additional privileges of an Amateur Extra Class operator license. The minimum passing score is 30 questions answered correctly.

(c) The topics and number of questions required in each question set are listed below for the appropriate examination element:

Topics	Element: 2	3(A)	3(B)	4(A)	4(B)
(1) FCC rules for the amateur radio services .....	10	5	4	6	8
(2) Amateur station operating procedures .....	2	3	3	1	4
(3) Radio wave propagation characteristics of amateur service frequency bands .....	1	3	3	2	2
(4) Amateur radio practices .....	4	4	5	4	4
(5) Electrical principles as applied to amateur station equipment ....	4	2	2	10	6
(6) Amateur station equipment circuit components .....	2	2	1	6	4
(7) Practical circuits employed in amateur station equipment .....	2	1	1	10	4
(8) Signals and emissions transmitted by amateur stations .....	2	2	2	6	4
(9) Amateur station antennas and feed lines .....	3	3	4	5	4
(10) Radiofrequency environmental safety practices at an amateur station .....	5	5	5	0	0

[54 FR 25857, June 20, 1989, as amended at 61 FR 41019, Aug. 7, 1996]

**§ 97.505 Element credit.**

(a) The administering VEs must give credit as specified below to an examinee holding any of the following documents:

(1) An unexpired (or expired but within the grace period for renewal) FCC-granted Advanced Class operator license document: Elements 1(B), 2, 3(A), 3(B), and 4(A).

(2) An unexpired (or expired but within the grace period for renewal) FCC-granted General Class operator license document: Elements 1(b), 2, 3(A), and 3(B).

(3) An unexpired (or expired but within the grace period for renewal) FCC-granted Technician Plus Class operator license granted before February 14, 1991) license document: Elements 1(A), 2, and 3(A).

(4) An unexpired (or expired but within the grace period for renewal) FCC-granted Technician Class operator license document: Elements 2 and 3(A).

(5) An unexpired (or expired but within the grace period for renewal) FCC-granted Novice Class operator license document: Elements 1(A) and 2.

(6) A CSCE: Each element the CSCE indicates the examinee passed within the previous 365 days.